Claims

[c1] In a wireless communications system providing for communication over two or more channels utilizing a communications architecture that calls for hopping from channel to channel during data transmission, a method for mitigating the effects of interference, the method comprising:

scanning the channels for interference and identifying channels experiencing interference;

transmitting only null packets when hopping to a channel identified as experiencing interference;

transmitting normal data when hopping to a channel not identified as experiencing interference.

[c2] The method of claim 1 wherein the scanning step is performed upon the commencement of data transmission.

[c3] The method of claim 1 wherein the scanning step is performed upon each passage of a first time period.

[c4] The method of claim 2 wherein the scanning step is repeated periodically during data transmission.

[c5] The method of claim 1 wherein the scanning step is performed when a data throughput rate falls below a predefined value.

[c6] The method of claim 1 wherein the scanning step is performed when requested by a user.

[c7] The method of claim 2 wherein the scanning step is repeated whenever:

a) a second time period has passed;

b) a data throughput rate falls below a predefined value; or

c) requested by a user.

[c8] The method of claim 1 wherein the communication architecture is the standard known as Bluetooth.

[c9] The method of claim 1 wherein the communication architecture is the standard

known as IEEE 802.15.1.

[c10] The method of claim 7 wherein the communication architecture is the standard known as Bluetooth.

[c11] 1)The method of claim 7 wherein the communication architecture is the standard known as IEEE 802.15.1.

[c12] In a wireless communications system providing for communication in the ISM communications frequency band by a communications device operating according to the Bluetooth standard, a method for mitigating the effects of interference, the method comprising:

upon power up of the device, scanning the available channels for interference and identifying channels experiencing interference;

transmitting only null packets when hopping to a channel identified as experiencing interference;

transmitting normal data when hopping to a channel not identified as experiencing interference.

[c13] The method of claim 12 wherein the scanning step is repeated periodically during data transmission.

[c14] The method of claim 12 wherein the scanning step is repeated when a data throughput rate falls below a predefined value.

[c15] The method of claim 12 wherein the scanning step is repeated when requested by a user.

[c16] The method of claim 12 wherein the scanning step is repeated whenever:

a) a third time period has passed;

b) a data throughput rate falls below a predefined value; or

c) requested by a user.

[c17] In a wireless communications system providing for communication in the ISM communications frequency band by a communications device operating according to the IEEE 802.15.1 standard, a method for mitigating the effects of interference, the method comprising:

upon power up of the device, scanning the available channels for interference and identifying channels experiencing interference;

transmitting only null packets when hopping to a channel identified as experiencing interference;

transmitting normal data when hopping to a channel not identified as experiencing interference.

[c18] The method of claim 17 wherein the scanning step is repeated when a data throughput rate falls below a predefined value.

[c19] The method of claim 17 wherein the scanning step is repeated when requested by a user.

[c20] The method of claim 17 wherein the scanning step is repeated whenever:

a) a fourth time period has passed;

b) a data throughput rate falls below a predefined value; or

c) requested by a user.